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ABSTRACT

This paper is devoted to a discussion of characteristics of innovative educational personnel and factors, such as the educational institution, that may affect innovative actions. The paper is divided into three sections. Section one presents a literature review that centers on three categories: leadership, qualities of innovativeness, and change agents. Section two discusses the school as a setting for innovation under topics such as the social context of the school, the structure and function of the school, and the roles of persons in the school setting. Section three speculates upon the behaviors most appropriate to school persons who are or might be considered to be innovative. Several broad categories of behavior are identified. (JA)

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BEHAVIOR OF INNOVATIVE PERSONNEL

by

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FOREWORD

A continuously changing world requires educational personnel who can prepare psychologically and professionally for forthcoming change and adapt instruction as change arrives. Since change, in a sense, makes beginners of professional practitioners, it tends to create hostility, suspicion, uncertainty, and insecurity. Reactions such as these are not conducive to implementing sensible innovations. Educational institutions not only reflect these responses but add others that are the result of organizational patterns, facilities, materials, community norms and expectations, and other factors which help or hinder the implementation of change.

That there is some significant educational change undertaken is remarkable when individual and institutional factors are taken into account. The urgent need to create schools which are responsive to societal change makes this paper a very important one. Griffin and Lieberman have analyzed the pertinent literature and synthesized their findings. Their report is useful for the many kinds of laymen and professionals responsible for making schooling responsive to changing societal requirements. The complexity of that task makes imperative the use of the best ideas and information to facilitate and speed up innovation.

This paper is useful for in-service staff development planning and programming. Certainly, it also should be used at the preservice level where a critical task is helping students of education to prepare for their change agent roles.

You may do further research on this topic by checking issues of Research in Education (RIE) and Current Index to Journals in Education (CIJE). Both RIE and CIJE use the same descriptors (index terms). Documents in RIE are listed in blocks according to the clearinghouse code letters which processed them, beginning with the ERIC Clearinghouse on Career Education (CE) and ending with the ERIC Clearinghouse on the Disadvantaged (UD). The clearinghouse code letters, which are listed at the beginning of RIE, appear opposite the ED number at the beginning of each entry. "SP" (School Personnel) designates documents processed by the ERIC Clearinghouse on Teacher Education. For readers uncertain how to use ERIC capabilities effectively, we recommend How To Conduct a Search Through ERIC, ED 036 499, microfiche $.75; hardcopy $1.85. It is available from the ERIC Document Reproduction Service, P. O. Box 190, Arlington, Virginia 22210.

--Joel L. Burdin, Director

February 1974

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TOPIC: *"Behavior of Innovative Personnel."*

DESCRIPTORS TO USE IN CONTINUING SEARCH OF RIE AND CIJE:

Behavior
*Behavior Patterns
Change Agents
Educational Change
Educational Development
*Educational Innovation
*Innovation
Institutional Role
*Personnel
Teacher Behavior

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*Asterisk(s) indicate major descriptors.

INTRODUCTION

The lack of systematic and intensive treatment of the behaviors of innovators in schools is testimony to the complexity of the issue. When one expects the innovator to influence a social system as complicated and as little understood as schools, the problem is compounded. A set of notions focusing on the attractiveness of people, charisma it might be called, seemed to explain in a conventional sort of way why some people could exert powerful leadership and others could not. But experience, research, and study show that this is a naive belief.[1] The person *is* central to innovation, but we must look at his effect upon others in a complex, interacting social setting in a much more systematic fashion than has been the case heretofore. We hope to look beyond charisma and establish some tentative links between the innovator, his behaviors, and the social system of the school.

If the argument against relying solely upon personal characteristics is accepted, the void left is immediately filled with questions: What can be identified as the critical reasons for the powerlessness of some otherwise powerful people when they try to innovate in schools? Do people behave differently in different organizational settings? If so, why? Are the consequences of innovative behaviors different according to setting? What, in fact, *are* the relations between an institution and its members in terms of innovation? Are there unique properties in schools which might help to explain such relations? When one sorts out the answers to these questions, educated guesses can be made regarding the most potentially powerful behaviors for innovators in schools.

This paper will a) present a summary of what has been said about innovators in various settings, b) describe the school as a particular setting for innovation, and, finally, c) speculate upon the behaviors most appropriate to school persons who are or might be considered to be innovative.

LEADERSHIP, INNOVATION, AND CHANGE AGENTS

Three categories of research and speculative writing have been selected in order to briefly illustrate what has been reported previously. These categories might be called leadership, qualities of innovativeness, and change agents.

Leadership

Probably the earliest widely accepted study of leadership, now a classic, is The Iowa Studies reported by Lewin, Lippitt, and White in the 1930s.[2] This study identified three categories of leadership: autocratic, laissez-faire, and democratic. Further, the study moved beyond simply naming the behavior but also demonstrated the direct effects of the three styles upon those identified as followers. It is important to note that these sets of behaviors, styles if you will, were seen as falling outside the personal traits which each of us carries with him and which had been assumed to be vital and directly related to "leadership."

Another significant study related to leadership is that of Anderson and Brewer which attempted to identify in school settings those behaviors identified by The Iowa Studies in laboratory settings.[3] Instead of finding the three styles noted by Lewin and his colleagues, only two were observed--dominative and integrative, which correspond to Lewin's autocratic and democratic. The significance of this study is not that the traits were observed and then identified, although this certainly was important, but that the link between the styles of teachers and behaviors of pupils was again verified. That is, dominative behavior of the teacher/leader corresponded to dominative and unproductive behavior of pupils, and integrative behavior of the teacher led to integrative and productive behavior of pupils.

Addressing the complex issue of effect of leadership, Preston and Heintz demonstrated in a laboratory setting that leadership is a powerful force in that it can be directly related to more than one behavior, personal and/or organizational.[4] There is evidence, then, that leadership has effects upon individuals as well as group behavior. In this case, participatory leadership is related to flexibility in group decision making, group consensus, and group satisfaction with decisions made. This extension allows us to move beyond the one-to-one relation of leader to follower and to consider the effect that certain leaders might have upon group behavior. The implications for leadership in schools are obvious.

Probably the most extensive study of leadership was that of Ohio State University in 1957.[5] Over a 10-year period, data were gathered from a variety of sources--business, industry, the military, and education. After analyzing many characteristics, two leadership qualities were found to be fundamental--initiating structure and consideration. Initiating structure refers to the ability of a leader to structure work relations to accomplish a given task, to create mechanisms which promote achievement of goals and facilitate the decision-making process. Consideration refers to the qualities of the leader's interpersonal relations.

Gross and Herriott studied the intricate relation of staff leadership in elementary schools with the organizational effects and determinants of variation in performance of school administrators.[6] For the purposes of this paper, the most compelling findings are those which call attention to the qualities of effective leaders. These qualities are directly related to the school setting--closeness of supervision, support of innovation, amount of off-duty time devoted to the position, and the importance of routine administrative duties. Again, a link was demonstrated to exist between these leadership behaviors and the behaviors of staff in that the more effective leader had greater effect upon staff morale, professional orientation of teachers, and pupils' learning.

Lieberman, studying the effect of elementary school principals on teacher morale, professionalism, and style in the classroom, defined leadership as task (organization of activities and resources to promote ideas and stimulation for teachers), authority (power retained or shared by the principal with the teachers), and expressiveness (consideration of needs and interests of teachers).[7] Each of these characteristics

might be seen as a continuum from low to high. It was found that high task on the part of the principal was related to high professionalism of teachers, high expressiveness by the principal was related to high morale of the teachers, and to a less clear degree, high authority by the principal was related to high authority of the teachers. Conversely, low authority of the principal was related to high professionalism of teachers. These findings again illustrate the link which exists between leader behavior and behavior of individuals and groups associated with the leader. The findings demonstrate that shared decision making affects professionalism of teachers. The lack of any clear relation between authority of the principal and morale of teachers, no matter where on the continuum they might fall, raises possibly confounding issues regarding the complexity of such relations and its effect on innovativeness.

Qualities of Innovativeness

In this section the identification of innovativeness moves beyond those persons who are labeled as or known as leaders.

Carlson has suggested that one way to identify the characteristics of innovative personnel is to study the patterns by which they link themselves with others in the organization.[8] In his study, the focus was upon school superintendents. Studying how changes are adopted led him to conclude that someone identified as an opinion leader--one who is listened to by others--is likely to be an innovator.

Rogers notes the importance of "understanding . . . the behavior of innovators . . . [as] essential to the comprehension of the central processes of social change."[9] This, of course, is a much more global and comprehensive notion of the effect of innovativeness than what has preceded. Using data drawn from rural sociology, industrial engineering, and anthropology, Rogers identifies specific innovative characteristics. Innovators are venturesome, tend toward the avant garde, and are risk-takers. As such, they move beyond what they know in terms of models and prior experience. They are cosmopolitan in that they are active and are acquainted with worlds beyond their own prescribed system. They are young. They exhibit high social status. They are aware of and consult information sources not integrally related to their own professional circumstances. They are to be found with other innovators in social as well as professional settings. Importantly, they are seen as being "deviants" by not only their colleagues but also by themselves--they do not stay within the norms of the social system. In conclusion, it should be noted that these characteristics are inferential in nature and drawn from research in many fields.

Change Agents

Identification of change agents and the characteristics which appear to be central to their behavior causes us to move beyond consideration of only those persons who work professionally in certain settings. Change agents are often persons outside a given organization who are identified as having the power to influence and who are then brought

into the setting to effect change. This distinction has been considered critical by sociologists, anthropologists, and others studying the dynamics of social change.

Only one set of characteristics will be reported here. Havelock lists the qualities of a change agent in three different categories of human behavior in order to present a composite picture.[10] The first category is that of attitudes which are considered related to effectively altering an existing condition. Broadly described, these attitudes are ones which illustrate a commitment to assisting others and being concerned about that assistance while still maintaining one's strong sense of identity and sense of power. The second category, knowledge, includes certain concepts of social systems which are most appropriate to use as bases for effecting change. For example, the organization is seen as open, and alternative routes to problem solving are recognized. People are seen by the change agent as natural resisters of change, and their value positions are understood. Further, the change agent sees his own role clearly and multidimensionally. The third category identified by Havelock considers the skills seen as necessary for change agents to possess. These skills include organization, initiation, implementation, maintenance, resolution of conflict, use of resources, collaboration, and diagnosis.

A major difficulty emerges when one confronts lists such as this one. How does one sort out and subsequently describe by role the characteristics considered most reasonable for effecting change? Havelock notes four possible roles: catalyst, solution giver, process helper, and resource linker.[11] These descriptions of role bring us full circle in our discussion of leadership, innovativeness, and change agentry. They suggest that we are necessarily concerned with the relation between roles and the social context in which they are expected to occur.

DIMENSIONS OF SCHOOLS AS SOCIAL SETTINGS

In describing briefly and rather globally the school as a social system, particular attention will be paid to some of the generalizations which have emerged through the inquiries, formal and informal, of social scientists, educators, and the like.[12] We speak of these dimensions as they relate to three broad categories of concern: the social context of the school, the structure and functions of the school, and the roles of persons in the school setting.

The Social Context of the School

It has been pointed out elsewhere that the school exists largely in isolation from other agencies or groups in the community that also might be considered as intentionally influencing socialization. The governmental and civic agencies which devote energy and other resources to questions of citizenship, productivity, satisfaction level, and so forth tend to be removed from schools both demographically and ideologically. The school itself often can be singled out as the agent of isolation in that it, and those persons in it, have maintained a "hands

off" policy. This oversimplification of the problem serves to dramatize the relatively weak relation between the school and even the most primary socializing agency, the family. In recent years, however, the isolation factor has caused serious questions to be raised as the search for innovation has gone forward. If the school is isolated and, further, if it can be seen as a closed system (that is, a system with few mechanisms to allow or promote an inward flow of ideas), then it is possible to conclude that innovations created outside the school have minimal prospects of gaining entrance. Conversely, however, the school does illustrate a certain vulnerability in that it is a public service agency and one of the few to which the public has direct and, if necessary, immediate access. The conflict here is apparent--a closed system with little idea flow from outside sources which, at the same time, is mandated by law to be accessible and, hence, vulnerable to outside influence and pressure. Recent decentralization attempts illustrate dramatically the problem which arises when agents, acting according to the school's vulnerability, overtake and largely ignore the isolation factor. The conflicts which have arisen relate directly but negatively to the traditionally assumed community access to the school, which has seldom been achieved in actual practice.

Further, the school is largely in the business of doing the greater society's bidding. It has been traditionally commonplace for boards of education to set the outside parameters of school operations. Broad goals of the curriculum are formulated. Numbers and nature of school staff are decided. Resources are allocated. Points of view regarding appropriate content, globally stated, are aired. These decisions, societal in nature and acted upon by the community's agents, are meant to be directly influential upon the persons in the school and in professional and client groups. In order for this to occur, however, it is necessary that the school as a social system formulate, maintain, and monitor a decision-making apparatus which is effective in the refinement and specification of these broad decisions in such a way that they truly do guide the school's operation. It is a rare case when such a condition exists, again largely due to the seriously weak linkages between the board of education and the school people, but principally due to the lack of systematic attention to the issue of decision making given by school people, both administrators and teachers. This condition will be treated in more detail below.

When one adds the variety and diversity of schools to the dimensions already indicated--closed system, vulnerability, lack of systematic links between decision groups--the problem is confounded. Although there is a tendency to speak of "schools" as though every school were much like every other school, we are perfectly aware of the extreme differences which abound in terms of pupil populations, demographic surround, size, and so forth. What characteristics must the innovator have as part of his personal/professional biography to be effective in such a setting? Even the physical placement of schools, especially in large school systems, reflects isolation, this time one from the other in addition to isolation from the rest of the community.

The Structure and Function of the School

It was indicated previously that schools can be viewed with some accuracy as closed systems. This is, obviously, not the same as saying rigid systems or strong systems or highly structured systems. In fact, just the opposite appears to be true. Schools, because of their lack of clear goal definition and limited monitoring and communication systems, can be described as loosely structured. This looseness has serious implications for internal decision making, resolution of value conflicts, provision of recognized and necessary support systems, specification of appropriate procedures, and recognition of goal achievement or non-achievement.

Of principal interest and importance for innovators is the already mentioned decision-making apparatus in the school setting. It has been found that decision-making at what might be called the middle-management level of schools is seriously deficient and, consequently, issues in need of resolution, which one might expect institutional persons to make, are passed on, often by default, to teachers. This is, to a degree, in conflict with the often-expressed notion that teachers cannot behave idiosyncratically or creatively because of decisions made by those higher up the organizational ladder. In at least one investigation not only was this position found to be inaccurate but, importantly, many critical curricular decisions did not appear to be made with any regularity by anyone but the teacher.[13] Clearly, if this tenative conclusion is widely reflective of practice, and we believe it is, the innovator is faced with a potential, if not actual, dysfunctional decision-making apparatus with built-in communication and articulation difficulties.

This illustrates one of the problem areas when the school is seen as a bureaucracy. The potential for conflict is high when schools are structured and organized according to what might be called the labor or production model and, concurrently, the persons working in the setting view themselves, rightly or wrongly, as professionals. The rhetoric surrounding the word "professional" includes constructs such as autonomy, self-governance, and self-renewal. These qualities or concepts are often in direct opposition with the leader/follower, management/labor, hierarchical organization of schools. The innovator, most likely a professional, finds himself, then, in a setting where relations between and among critical variables are largely proscribed by a structure which does not encourage "making waves" of a unique, autonomous, self-renewing nature.

In much of the preceding the principal difficulty lies in the lack of regularity regarding important organizational characteristics. Is there regularity in schools? Certainly, the traditionally valid and historically powerful practice of moving young people through the grades and through bodies of content and skills is an example of regularity. Even though there is an incredibly wide variability within the groups of students and a range of procedures to deal with them, schools tend to rationalize decisions about the variability into service of this almost lockstep movement of young people from entry through graduation. This rationalization sets time and space boundaries which imply stability

and constancy but which really overlay infinite variety with a close to artificial sorting process. Deviance from this practice is usually the product--the learner elects to drop out of the system. Routines, steps, regularities tend to serve the needs of the organizational structure rather than the client group being served or the professional educators within the setting. Attempts to alter this structure have met with limited success.[14]

A principal reason why efforts to induce change in schools have not succeeded beyond a minimal level is the lack of support systems to nurture and sustain such change. An analysis of the rejection or dwindling effect of many of the innovative proposals of the sixties leads one to conclude that the innovations which moved beyond another form of routinization simply could not sustain themselves without additional system efforts directed toward such supportive variables as teacher training, provision of additional materials of instruction, reconceptualization of roles of supervisors and administrators, reconsideration of the decision-making process to become more in line with the innovations, and carefully designed reordering of priorities. The implication here is not one of additional resources to support the innovation but of a carefully conceived redistribution of the resources which are and have been available. It is not difficult to foresee the consequences of such deliberation in a setting which has, over many years, routinized itself and rationalized these routines or regularities to the point that they have become law.

A consequence of the diversity of populations--clients, patrons, professionals--is the multiplicity of values which is found in schools. This wide-ranging and disparate sense of what ought to be is largely ignored by the school system and, consequently, informal groupings of people occur which are characterized by similar values and goal orientations. With such a set of potentially clashing groups, few or none of which might be aligned with the formal organization's stated value position, there is a built-in barrier to change which might be either abrasive to or destructive of the informal systems.

This direct discussion of the people within the institution leads to consideration of the roles of persons in the school setting.

The Roles of Persons in the School Setting

Role theory and research focussed on role relations have received much attention during the recent past.[15] We will treat some of that inquiry as it appears to point to some clues for the innovative person in schools.

Of increasing concern is the realization that there is very little known about what it is to be an effective teacher or administrator. Research tends to point us toward recognition of certain styles of teaching or administering with very little attention paid to the difficult question of quality. Widespread discontent, within and without the schools, indicates that our conventional modes of discussing teaching are especially inadequate. The recently emerged romantic

critics of public schools have stopped short of proposing exactly what teaching should be and, certainly, have not attempted to validate in any research sense the vague concerns for quality that they present. What has happened, of course, is a certain amount of breast-beating or, conversely, a fight-fire-with-fire defense of what is and has been occurring. So, the question of quality remains a largely unanswered one. The implications for how school people perceive their roles in the setting of the school are enormous. On the one hand there is a large-scale or broadside attack, and on the other some only weakly mounted defenses of what is believed to be good and true. This condition prevails for all professionals in the setting and produces several anti-innovation conditions. First, the lack of certitude is unsettling and forces one to move as safely as possible through professional life. Also, the expectations of others are difficult to meet, even if desired, because of the lack of conviction about who and what one is, professionally. Further, the differentiated roles--administrators, paraprofessionals, teachers, supervisors--allow for ambiguity and overlap and the resultant clash of both expectations and manifest behavior.

How does this condition come to be? At first it simply appears to be rooted in the lack of clarity which, if true, would lead the innovator toward the seeking of agreement and clarification of roles. What is not accounted for in such an argument is the power of a long-standing process of socialization which has pervaded the schools. There is evidence that this tradition of rounding off the personality corners so that people will fit the system is pervasive and strong. The most obvious and simplistic argument for this power is the tendency of the newly appointed teacher to conform to the behaviors of his colleagues who have been around for a longer period of time. Again, this "evening out" of roles contributes to the rejection of innovations and, often, of the innovative person. If the change does manage to gain a foothold and be sustained, it is most often as an example of encapsulization wherein the innovation exists by and of itself with little effect upon the rest of the environment.

Socialization of people in schools is not limited to teachers. Students certainly learn the rules of the game early in their school careers and, with the Vietnam explosion of the late sixties a notable exception, tend to play out the rules and their prescribed passive roles with little energy expended on changing the system. (There is some speculation that the lessons learned from the sixties are chiefly centered around the principle "you can't change the system" and, hence, the relative passivity of present student populations might be explained as giving in to a foregone conclusion.) Of major interest here is the fact that the clients of schools--students--are captives of the system in that they are compelled by law to attend for a certain period of time. This mandated attendance, in conflict with the production model of supply and demand as in previous examples, tends to blunt the power of the client group to make significant or lasting changes upon the system. This surely is incongruous for a social agency which has adopted the form but not the principles of a bureaucratic model of organization.

Another factor confounding the roles of teachers in schools is the tendency toward isolation from colleagues. Outside of the regularities noted earlier, time and place and minimal standards of behavior, pedagogical acts take place most often apart from colleagues, either administrators or other teachers. Teachers accede, then, to the standards which they hear about or which they infer from either written or oral sources. But, and importantly, there is little face-to-face confrontation with anyone else in the professional segment of the system regarding decisions and actions related to the instructional component of their positions. The consequences of such isolation include parochialism, status, limited pedagogical view, and a low degree of mobility within the profession. This last, mobility, is also critical when examining roles of teachers. Because the professional upward mobility occurs when one leaves one position, teacher, to go to another, administrator or supervisor, with the attendant significant differences in terms of function, there is little in the way of external or internal rewards for teaching *qua* teaching. That is, becoming increasingly more competent as a teacher, however defined, does not ensure additional rewards; most often there are none of either a monetary or status nature. The rewards then must come from contact with the students and with the teacher's own sense of identity and purpose--not always easy to manage or to recognize as significant.

Evidence supports the contention that the lack of systematic or clear role definition, with attendant attention to rewards and norms, is a powerful force against innovation. Witness the attempts to introduce team teaching or forms of differentiated staffing. The necessary power redistributions and the important role clarifications inherent in such schemes have caused professional and personal anguish so strong as to block the acceptance and adoption of the innovations.

The preceding discussion has attempted to clarify some of the most powerful blocks the innovator must encounter when moving into the schools to effect change. Implicitly, then, it is important to know these barriers in some detail, certainly more than is presented here, and to develop from such understanding a set of strategies which does not ignore them. Unfortunately, there is little research regarding the latter, although it is possible to make some speculations.

THE INNOVATOR IN SCHOOLS

It is important to point out that we have not intended to illustrate the impossibility of innovation in schools but to suggest what must be known in order to accomplish change. It is believed that in order to act effectively in a complex setting the complexity must be understood. A principal difficulty in moving from this complexity toward acting upon and within it is that research has pointed out the presence of conditions antithetic to innovation but has not helped us to engage in the act of innovating. What follows, then, is a series of propositional statements regarding desired behavior of innovative school personnel--educated guesses based upon the foregoing and other data sources--which are thought to have potentially powerful impact

upon the business of schooling and which are considered necessary as part of the repertoire of the innovator. Importantly, these behaviors are ones which can be learned, thus moving beyond personal traits.

Diagnosis

The educational innovator needs the skills and knowledge attendant on diagnosis, not only of specific curricular or instructional problems but also of the system into which such innovations are to be introduced. Diagnosis is basically a set of problem-related questions whose answers provide insight into the most reasonable solutions to be suggested. Questions such as the following should be considered: What beliefs and knowledge are held by various persons to be affected by innovation: teachers, students, boards of education, parents, etc.? Is there a need for more information about the problem or the proposed innovation? What is the level of awareness of the problem itself? Have the problems been clarified and agreed upon? What are the identifiable solutions most appropriate to the setting? What should be the order of priority for action, based upon the analysis of perceptions regarding the problem? Who is likely to be most affected by the proposed changes? What must be done with these people to get their support? The answers to such diagnostic questions provide bases for subsequent action which, given the system described earlier, tend to alleviate the potential stress in the system.

Work with Groups

Much attention has been given to the necessity of recognizing that school systems are groups of people organized, however loosely, to engage in certain activities and/or accomplish certain goals. Groups function with lines of communication, according to norms of acceptable behavior, make decisions, have varying degrees of cohesiveness, and illustrate high or low morale. In order for the innovator to function effectively in this essentially social system he must understand these phenomena, diagnose them with reasonable precision and accuracy as noted above, and unleash his energy toward the powerful change impetus which too often lies dormant at some unrecognized level of the group consciousness. The leadership studies noted earlier call attention to the link between leader behavior and group behavior. Prior to such an effect, however, one must develop group cohesiveness, take stock of who is making what decisions, determine the reason for the group's existence, and ask penetrating questions regarding individual group members' perceptions of what publicly stated group goals and procedures mean to them. As has been noted earlier, schools exist physically and ideologically in isolation from one another and are seldom organized structurally for communication effectiveness. This condition points to the necessity for the innovator to carefully select the topics or procedures most likely to be compelling enough to overcome it.

Self-Awareness

The innovator must be conscious of his strengths, his weaknesses, his power in given situations, and his image in the immediate and removed

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upon the business of schooling and which are considered necessary as part of the repertoire of the innovator. Importantly, these behaviors are ones which can be learned, thus moving beyond personal traits.

Diagnosis

The educational innovator needs the skills and knowledge attendant on diagnosis, not only of specific curricular or instructional problems but also of the system into which such innovations are to be introduced. Diagnosis is basically a set of problem-related questions whose answers provide insight into the most reasonable solutions to be suggested. Questions such as the following should be considered: What beliefs and knowledge are held by various persons to be affected by innovation: teachers, students, boards of education, parents, etc.? Is there a need for more information about the problem or the proposed innovation? What is the level of awareness of the problem itself? Have the problems been clarified and agreed upon? What are the identifiable solutions most appropriate to the setting? What should be the order of priority for action, based upon the analysis of perceptions regarding the problem? Who is likely to be most affected by the proposed changes? What must be done with these people to get their support? The answers to such diagnostic questions provide bases for subsequent action which, given the system described earlier, tend to alleviate the potential stress in the system.

Work with Groups

Much attention has been given to the necessity of recognizing that school systems are groups of people organized, however loosely, to engage in certain activities and/or accomplish certain goals. Groups function with lines of communication, according to norms of acceptable behavior, make decisions, have varying degrees of cohesiveness, and illustrate high or low morale. In order for the innovator to function effectively in this essentially social system he must understand these phenomena, diagnose them with reasonable precision and accuracy as noted above, and unleash his energy toward the powerful change impetus which too often lies dormant at some unrecognized level of the group consciousness. The leadership studies noted earlier call attention to the link between leader behavior and group behavior. Prior to such an effect, however, one must develop group cohesiveness, take stock of who is making what decisions, determine the reason for the group's existence, and ask penetrating questions regarding individual group members' perceptions of what publicly stated group goals and procedures mean to them. As has been noted earlier, schools exist physically and ideologically in isolation from one another and are seldom organized structurally for communication effectiveness. This condition points to the necessity for the innovator to carefully select the topics or procedures most likely to be compelling enough to overcome it.

Self-Awareness

The innovator must be conscious of his strengths, his weaknesses, his power in given situations, and his image in the immediate and removed

community. This self-awareness extends to others when he begins to identify those most likely to play complementary roles. Again, questions help us to come to grips with these issues: What is my effect upon others? Where does that effect assume positive values--negative values? Who can help me and whom can I help? What can I do by myself? What do others expect of me? Can these expectations be altered? When am I most effective, in what circumstances? These questions are meant to convey the constant self-evaluation which must accompany the externally perceived actions of the innovator if he is to interact positively with others in the setting to produce change.

Knowledge of the Change Process

It is important for the innovator to be aware of the phenomenon which might be labeled the "ripple effect." It has been demonstrated that most changes, however minimal, produce effects upon the rest of the system despite the weak linkages noted earlier. This can work positively or negatively for innovation. If one is unaware of the phenomenon, it is likely that unforeseen consequences outside the particular setting of the change may reflect upon the proposed change and effectively damage it. It is possible, however, to foresee such consequences to a degree and utilize them to advantage. This latter is particularly true if one wants others to come to recognize a problem which is multidimensional. Acting upon one of the dimensions, probably one which is not highly valued by the group affected, may produce a recognition that the constants of the small problem are also present to a greater and stronger extent in the aggregate to which the smaller problem belongs. Another necessary understanding related to the change process is that organizational or structural changes are successful to the degree that they are accompanied by knowledge of the behaviors that accompany them. An example might be the introduction of team teaching which is structural in intent but which gives rise to the basic issues of schooling in a microcosm. Simply mandating that certain teachers shall work together does not take care of the negotiations which will be a consequence of the new mode of grouping. The negotiations will focus on curricular issues, instructional issues, teacher roles, the need for new modes of communication, the resolution of value differences, the necessity of self-revelation, the impact upon children and community and other publics, and related issues. The point here, then, is that the innovator must move beyond recognition of self and motive toward effect upon others and take into account the knowledge available which makes that extension of vision fruitful for innovation. This knowledge is available from a variety of sources and can provide useful insight into the acts of changing schools.[16]

Shared Decision Making

The successful innovator recognizes the complexity of schools and school systems. He understands the relative isolation of teachers and others within the setting. He accepts the principle that decisions which affect others are most powerful when they are made with those others. The implication here is clear: Shared decision making is more likely to result in effective and lasting change than are decisions

which are imposed on others. It is vital to recognize that sharing decision making does not mean a relinquishment of the leadership role; it is an extension of that role and a manifestation of an internalization of the knowledge about social systems and how they can function more effectively.

Gradualism

Etzioni has drawn the distinction between gradualism and grandeur when introducing innovations.[17] Gradualism allows for new behaviors to be practiced, refined, and made a lasting part of one's repertoire. Grandeur forces members of the school into marked, dramatic, and unfamiliar behaviors quickly with little of the necessary buildup. When gradualism undergirds a change strategy, as here suggested it should, new rewards must be developed or old ones redirected so that the newly adopted behaviors are seen as valued, prestigious, and important. Too often, however, even the "gradualist" neglects the reward system and its effect, positive or negative, upon teachers and others. Such neglect is the cause of many innovative practices being neglected to the point where they wither and die.

Construction of New Support Systems

The innovator must be able to move beyond his conception of what the change will be to an understanding of what the change will require not only for initiation but for sustenance. A redirection of present rewards has been mentioned. This conception of redirection is important when one considers what else in the system is necessary to carry out the innovation. In times of economic crunch it is not feasible to depend largely upon outside resources--it is necessary to reconceptualize allocation of goods and services already available. Caution is mandatory when such redirection activity occurs in that it has already been pointed out that one change can effect not only its immediate purview but other points in the school system. Careful analysis of present support systems and how they function will point toward redistribution strategies least likely to upset the innovator's particular valued apple cart. This is particularly true when one adds to a system rather than replacing something in the system with something else.

Action upon Subsystems

The many subsystems, formal and informal, operating concurrently in school settings may or may not interact. They may be in conflict, particularly the informal ones which arise out of a need for people to be with others who share their values and belief systems. They may be inside or outside the school itself (parent groups, for example). For successful innovation to take place it is necessary that these subsystems be identified and then, whenever possible, linked together to provide support for the innovation. The linkage can be dependent for initial action upon generalities such as "all children should be educated" but will need more concrete and specific reasons to act together when confronted with changes in their loosely defined group structures. Too often school people isolate groups--parents, students, teachers, grade levels of teachers, administrators, paraprofessionals--when all

are needed to make a change work. What is suggested here is moving significantly beyond the information-giving linkages most often found in schools toward a conception of totality of attack with unified focus.

Knowledge of Own Social System

Closely aligned to knowledge of self is knowledge of one's own social interactions and their power or lack of power. It is vital to know who in one's professional environment is not influential upon one's own behavior. Also, it is important to attempt to ferret out why this is true. This conception can then be extended to include an examination of the opinion leaders in the school setting and an analysis of the reasons certain people are identified and others not. An important distinction must be made regarding the difference between informed leaders--those who know what it is necessary to know--and opinion leaders who exert influence upon the expressed feelings and thoughts of their colleagues. Identification of both groups of individuals is extremely valuable for the innovator.

Cosmopolitanism

Frequent mention of cosmopolitanism pervades the change literature. For our purposes the term means an extension of knowledge and beliefs beyond what one might find in the immediate setting; vision or horizons far afield might be used synonymously. Extending the concept from the way the innovator sees himself and his world to ways in which the innovator can help others to have the same characteristics is one way of introducing a greater degree of acceptability of change into the school setting. How can people be helped to see more than their intimate problems, materials, ideas, colleagues? One strategy is to place people, with their consent, with others who have the potential to alter vision while, at the same time, being supportive. Provide opportunities for "strangers"--people, places, ideas, events--to get into the school lives of educators and those concerned with education. The resultant cosmopolitanism reduces the possibility that change, as change, is as powerful a threat as when the unfamiliar is exotic, strange, and feared.

Development of a Core Support Group

Outside of individual teachers' efforts to make changes in classrooms in terms of instructional practices and procedures, efforts to change school systems usually involve many persons. The necessity to identify and then to maintain and add to a group of people who will act with the innovator is considered essential. Too often the innovation founders because it is identified with only one person, or at best a few others, and the human energy needed to induce and sustain the change just is not present. Changing a system is extraordinarily difficult and demanding of personal resources. One can alleviate this resource drain by gathering around him a group of people who will entertain the change, engage in it, lead others to join in, and be supportive during early trial phases. An ideal situation, of course, would be for the support group to be composed of persons representative of the subsystems noted earlier, the opinion leaders, the informed leaders, and

so forth. The stronger the support group and the greater its willingness to experiment and keep going, the more likely the innovation will be to take hold and become part of the larger system.

The Image of the Innovator and His Manifest Behavior toward Others

In keeping with the research on leadership reported earlier, it is considered vital that the innovator be seen as one who is supportive and who relates positively to others as valued human beings. It will be recalled that such terms as empathy, expressiveness, and consideration emerge from some of the research studies. It is not enough to relate to others only in terms of idea exchange or, less desirable, as "teller" to others. One should exhibit behavior which indicates recognition of the conflict, problems, tensions, stress, fear, and tentativeness which accompany innovation. Such human reactions are natural and should be seen as natural. It is sometimes important to stop the idea flow long enough to allow the empathy to flood the environment so that the ideas can take root in receptive minds.

CONCLUSION

This paper has presented selected research findings and speculations regarding leadership, innovation, and change agents; synthesized principles of organizations as they are related to schools; and introduced broad categories of behavior which are thought to be potentially powerful for innovators in their attempts to alter the conditions of schooling. Certainly, the scope of the paper is not as broad nor as deep as the subject warrants. It is important for hypotheses regarding innovative behavior to be further developed and tested for their effect upon schools and school people. It is hoped that increased attention to this presumed need will yield results which will be of benefit to teachers, administrators, parents, and, most importantly, to students.

NOTES

1. Cecil A. Gibb, "Leadership," in Handbook of Social Psychology, edited by Gardner Lindzey (Cambridge, Mass.: Addison Wesley Publishing Co., 1954).

2. W. P. Lewin and others, "Leader Behavior and Member Reaction in Three Social Climates," reported in Group Dynamics, 2nd ed., edited by Dorwin Cartwright and Alvin Zander (New York: Row Peterson and Co., 1960).

3. Harold H. Anderson and Helen M. Brewer, Dominative and Integrative Teachers, Applied Psychology Monograph #6 (Stanford, Calif.: Stanford University Press, 1945).

4. Ray K. Heintz and Malcolm Preston, "Effects of Participation vs. Supervisory Leadership on Group Judgment," in Group Dynamics, 1st ed., edited by Dorwin Cartwright and Alvin Zander (New York: Harper & Row, 1953).

5. Ralph Stodgill and Alvin E. Coons, "Leader Behavior: Its Description and Measurement," Research Monograph (Columbus: Ohio State University, 1957).

6. Neal Gross and Robert Herriott, Staff Leadership in Public Schools: A Sociological Inquiry (New York: John Wiley & Sons, 1965).

7. Ann Lieberman, "The Effects of Principal Leadership on Teacher Morale, Professionalism and Style in the Classroom" (Ph.D. dissertation, University of California at Los Angeles, 1969).

8. Richard O. Carlson, Adoption of Educational Innovations (Eugene: University of Oregon, Center for the Advanced Study of Educational Administration, 1965).

9. Everett M. Rogers, "What Are Innovations Like?" in Change Processes in the Public Schools (Eugene: University of Oregon, Center for Advanced Study of Educational Administration, February 1965).

10. R. G. Havelock and M. C. Havelock, Training for Change Agents (Ann Arbor: University of Michigan, Institute for Social Research, Center for Research on Utilization of Scientific Knowledge, 1973).

11. R. G. Havelock, Planning for Innovation through Dissemination and Utilization of Knowledge (Ann Arbor: University of Michigan, Institute for Social Research, July 1969).

12. See, for example: Charles Bidwell, "The School as a Formal Organization," in Handbook of Organizations, edited by James G. March (Chicago: Rand McNally & Co., 1965) and Matthew Miles, "Some Properties of Schools as Social Systems," in Change in School Systems (Washington, D.C.: National Education Association, National Training Laboratories, Cooperative Project for Educational Development, 1967).

13. Gary A. Griffin, "Curricular Decision Making in Selected School Systems" (Ph.D. dissertation, University of California at Los Angeles, 1970).

14. Seymour Sarason, The Culture of the School and the Problem of Change (Boston, Mass.: Allyn & Bacon, 1971).

15. D. Katz and R. Kahn, "The Taking of Organizational Roles," in The Social Psychology of Organizations (New York: John Wiley & Sons, 1966).

16. See, for example: W. Bennis and others, The Planning of Change (New York: Holt, Rinehart & Winston, 1968) and N. Gross and others, Implementing Organizational Innovations (New York: Basic Books, 1971).

17. Amitai Etzioni, Studies in Social Change (New York: Holt, Rinehart & Winston, 1966).

18. The idea of a core group is cogently discussed in Seymour Sarason's The Creation of Settings and the Future Societies (San Francisco, Calif.: Jossey-Bass, 1972).

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